

The acidity of the hydroxy-tautomeric form of dimethylphosphite stabilized with chromium group metals

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Abstract

© 2016 Taylor & Francis Group, LLC. We have revealed that the reaction of hexacarbonylm etal(0) with the dimethylphosphite can afford the organometallic species having the hydroxyl-tautomeric form of the H-phosphonate in the metals' coordination sphere. Theoretical and experimental investigations reveal the strong acidity of these organometallic compounds as well as their possibility to take part in electrophilic hydrophosphorylation of inactivated C=C and C \equiv C bonds.

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Keywords

acidity, chromium group complexes, Dimethylphosphite, hydroxy-tautomeric form